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ABSTRACT

This document describes the major organizational components of the Educational Resources Information Center (ERIC) system, the interactions between those components, and the major products and services provided by those components. (WTB)

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U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

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ERIC

Processing Manual

Rules and Guidelines for the Acquisition, Selection, and Technical Processing of Documents and Journal Articles by the Various Components of the ERIC Network

Section I: Introduction

June 1992

Educational Resources Information Center (ERIC)
U.S. Department of Education

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TABLE OF CONTENTS

PREFACE ..... *I-v*

I. INTRODUCTION **I-1**

A. General I-1

B. ERIC System Components I-6

1. Central ERIC I-6
2. ERIC Clearinghouses I-6

a. Adjunct ERIC Clearinghouses I-8
b. ERIC Partners I-8

3. Support Contractors I-13

a. ERIC Processing and Reference Facility I-13
b. ERIC Document Reproduction Service (EDRS) I-16
c. ACCESS ERIC I-17
d. U.S. Government Printing Office (GPO) I-17

4. Private Sector Vendors I-18

a. *Current Index to Journals in Education* (CIJE) Publisher I-18
b. Online Access Vendors I-18
c. CD-ROM System Vendors I-19
d. Journal Article Reprint Services I-19

C. Major ERIC Products I-19

1. *Resources in Education* (RIE) I-20
2. *Current Index to Journals in Education* (CIJE) I-20
3. *Thesaurus of ERIC Descriptors* I-20
4. *ERIC Identifier Authority List* (IAL) I-21
5. ERIC Database in Machine-Readable Form I-21

a. Magnetic Tapes (ERICTAPES) I-21
b. Online Files I-22
c. CD-ROM Systems I-22

6. Document Reproductions I-23

a. Microfiche I-23
b. Paper Copy (PC) Reproductions I-23

7. Journal Article Reprints I-24

8. ERIC Clearinghouse Publications I-24

a. Monographs, Reviews, Bibliographies, Syntheses, etc. I-24
b. Digests I-24

9. Reference Tools Providing Access to the ERIC Database (ERICTOOLS) I-25

LIST OF ILLUSTRATIONS

PAGE

Figure I-1: ERIC System Components I-2

Figure I-2: ERIC System—Processing Interactions I-4

Figure I-3: ERIC—A Profile I-5

Figure I-4: ERIC Clearinghouses—Complete List (With Prefixes) ..... I- 9

Figure I-5: ERIC Clearinghouses (and Other Network Components) (with Addresses and Scope Notes) I-10

Figure I-6: List of Adjunct ERIC Clearinghouses I-12

PREFACE

ERIC SYSTEM OF MANUALS

The following manuals govern ERIC's policies and procedures:

I. Policy and Administrative Procedures Manuals

A. *ERIC Policy Manual*
B. *Administrative Procedures and Guidelines for ERIC Clearinghouse Management*

II. Operations Manuals

A. *ERIC Processing Manual* (EPM)
B. *User Services and Reference Manual*
C. *Publication/Product Preparation Manual* (Projected)

The *ERIC Processing Manual* is the operations manual concerned with bibliographic database building.

ORGANIZATION OF EPM

The *ERIC Processing Manual* (EPM) is organized into ten (10) major Sections, each dealing with a major functional work area in the development of the ERIC bibliographic database. Each is designed as an independent module that contains all that is necessary to perform the function involved. Each has its own subject index.

There are three supporting appendices: one providing subject scope statements for each ERIC Clearinghouse (to be used in assigning documents to Clearinghouses and transferring documents between Clearinghouses); one providing guidance for the physical preparation of documents for microfilming; and one detailing each Clearinghouse's special indexing practices. In addition, there is an extensive glossary (and acronym list) providing definitions for various technical terms used throughout the ERIC manuals. A comprehensive subject index provides easy access to the content of all Sections.

SECTION	TITLE [Content]	NUMBER OF PAGES	
I	Introduction [An Overview of ERIC]		27
II	Acquisitions [Acquiring Documents/Articles for ERIC]		56
III	Selection [Selecting Documents/Journals to be Processed]		40
IV	Handling and Shipping [Marking, Logging, Mailing Input]		42
V	Cataloging [Creating Descriptive Citations]		212
VI	Abstracting/Annotating [Writing Brief Narratives of Content]		38
VII	Indexing [Assigning Subject Index Terms]		60
VIII	Vocabulary Development and Maintenance		
	Part 1 - Descriptors [Thesaurus Upkeep]		182
	Part 2 - Identifiers [IAL Upkeep]		58
IX	Data Entry [Keying and Transmitting Bibliographic Data]		56
X	Database Changes (Post-Publication) [Backfile Modifications]		16
		Subtotal	787
Appendix A	ERIC Clearinghouse Scope of Interest Guide		144
Appendix B	Document Preparation (For Filming)		20
Appendix C	ERIC Indexing Handbook (Clearinghouse Indexing Practices)		137
		Subtotal	301
	Glossary of Terms (and Acronym List)		35
	Index		
		Total	1,123

AUDIENCE FOR EPM

The *ERIC Processing Manual* (EPM) is intended primarily for the use of the ERIC Clearinghouses and adjunct ERIC Clearinghouses engaged in acquiring, selecting, and processing (cataloging, indexing, abstracting) bibliographic material for the ERIC database. Since the ERIC Clearinghouses are geographically separated, it is necessary to have a single set of printed guidelines to achieve standardized inputs from all Clearinghouses and to ensure an internally consistent database.

The *EPM* is not intended as a guide to the internal centralized functions of the ERIC Processing and Reference Facility, although it deals with those functions essential for Clearinghouses to know, e.g., pagination procedures, vocabulary maintenance procedures, etc. Similarly, the *EPM* is not intended to cover the functions having to do with dissemination and use of the ERIC database, e.g., reference, user services, publication/product preparation, outreach, etc.

The *EPM* will also be of interest to some users in that it deals in detail with the construction of the database that those users search. The kinds of documents that are selected for ERIC, the definitions of the individual data elements cataloged, the rules for indexing and abstracting are all matters that affect retrieval and, when known, can improve retrieval results.

AVAILABILITY OF EPM

The *ERIC Processing Manual* (EPM) is a working document in daily use to provide the rules and conventions by which the ERIC database is constructed. It is routinely modified to meet new problems, to provide additional needed elaboration, and to be responsive to changes in priorities. All suggestions for change should be directed to the Editor, *ERIC Processing Manual*, at the ERIC Facility.

Revised pages are prepared and distributed to the Clearinghouses on an "as needed" basis. Each revised page is dated in the following way in order to distinguish it from the earlier dated page it replaces, e.g., *"Revised December 1992."* In addition, parallel lines are placed in the right hand margin in order to identify the specific text changed in the revision.

Shelf copies of the individual *EPM* sections all receive the revised pages at the time the revisions are printed. However, because of the wide distribution of the *EPM*, both domestically and abroad, it is not possible for ERIC to automatically provide revised pages to all previous recipients of the *EPM*.

Periodically, the number of revision pages added to a given Section becomes such that a general revision of the entire Section is done in order to smooth rough edges and integrate new material. Similarly, eventually it becomes necessary for the same reasons to prepare a totally new edition. The previous two full editions of the *EPM* were dated 1974 (ED-092 164) and 1980-83 (ED-219 082), respectively. The present edition is being issued in 1992 and supersedes all previous editions.

ACKNOWLEDGEMENTS

The *ERIC Processing Manual* (1992) has been prepared by the staff of the ERIC Processing and Reference Facility, under the general editorship of its Director, Ted Brandhorst. The Sections on "Acquisitions" and "Selection" were prepared by Gail Mathews, Acquisitions Librarian. The Sections on "Vocabulary Development and Maintenance—Descriptors" and "Indexing" were prepared by Jim Houston, Lexicographer. The Sections on "Cataloging", "Identifiers", and "Data Entry" were prepared by Carolyn Weller, Assistant Director, Operations. The Sections on "Introduction", "Handling and Shipping", "Abstracting/Annotating", "Database Changes (Post-Publication)", and "Document Preparation (For Filming)" were prepared by Ted Brandhorst. All Sections were reviewed by Central ERIC staff (particularly Kevin Arundel and Bob Thomas) and ERIC Steering Committee members (particularly Jane Henson (SO), Anita Colby (JC), and Sandra Kerka (CE)). Needless to say, the revisers built on sections prepared by previous generations of ERIC staff at the Clearinghouses, Central ERIC, and the Facility. Today's EPM contains the distilled expertise of literally hundreds of ERIC workers, 1966-1992.

I. INTRODUCTION

A. General

The purpose of this Section is to introduce the major organizational components of the Educational Resources Information Center (ERIC) system and the major products produced by those components. Section I.B provides a concise description of the functions performed by each component. Section I.C provides a concise description of each product.

As shown in **Figure I-1**, the components of the ERIC system are:

- Central ERIC
- ERIC Clearinghouses
  —Adjunct ERIC Clearinghouses
- Support Contractors/Services
  —ERIC Processing and Reference Facility
  —ERIC Document Reproduction Service (EDRS)
  —ACCESS ERIC
  —U.S. Government Printing Office (GPO)
- Private Sector Vendors
  —CIJE Publisher
  —Online Access Vendors
  —CD-ROM System Vendors
  —Other Vendors, e.g., Journal Article Reprint Services

Central ERIC is a program office within the U.S. Department of Education, Office of Educational Research and Improvement (OERI), and is the Governmental arm of ERIC.

The ERIC Clearinghouses are non-profit contractors located across the country on a decentralized basis within universities or non-profit organizations having a pre-existing interest in the subject area covered by the Clearinghouse.

The ERIC Processing and Reference Facility ("ERIC Facility"), the ERIC Document Reproduction Service (EDRS), and ACCESS ERIC are all for-profit support contractors providing technical and professional services for ERIC on a centralized basis.

The U.S. Government Printing Office (GPO), while not a formal member of the ERIC system is, in effect, the printing contractor for ERIC's monthly abstract journal *Resources in Education* (RIE).

The private sector vendors, that offer the public various value-added products/services based on the ERIC database, are not contractors to the ERIC system, but ERIC depends heavily on such entrepreneurial vendors to achieve wide dissemination of its data (at no cost to ERIC).

ERIC System Components

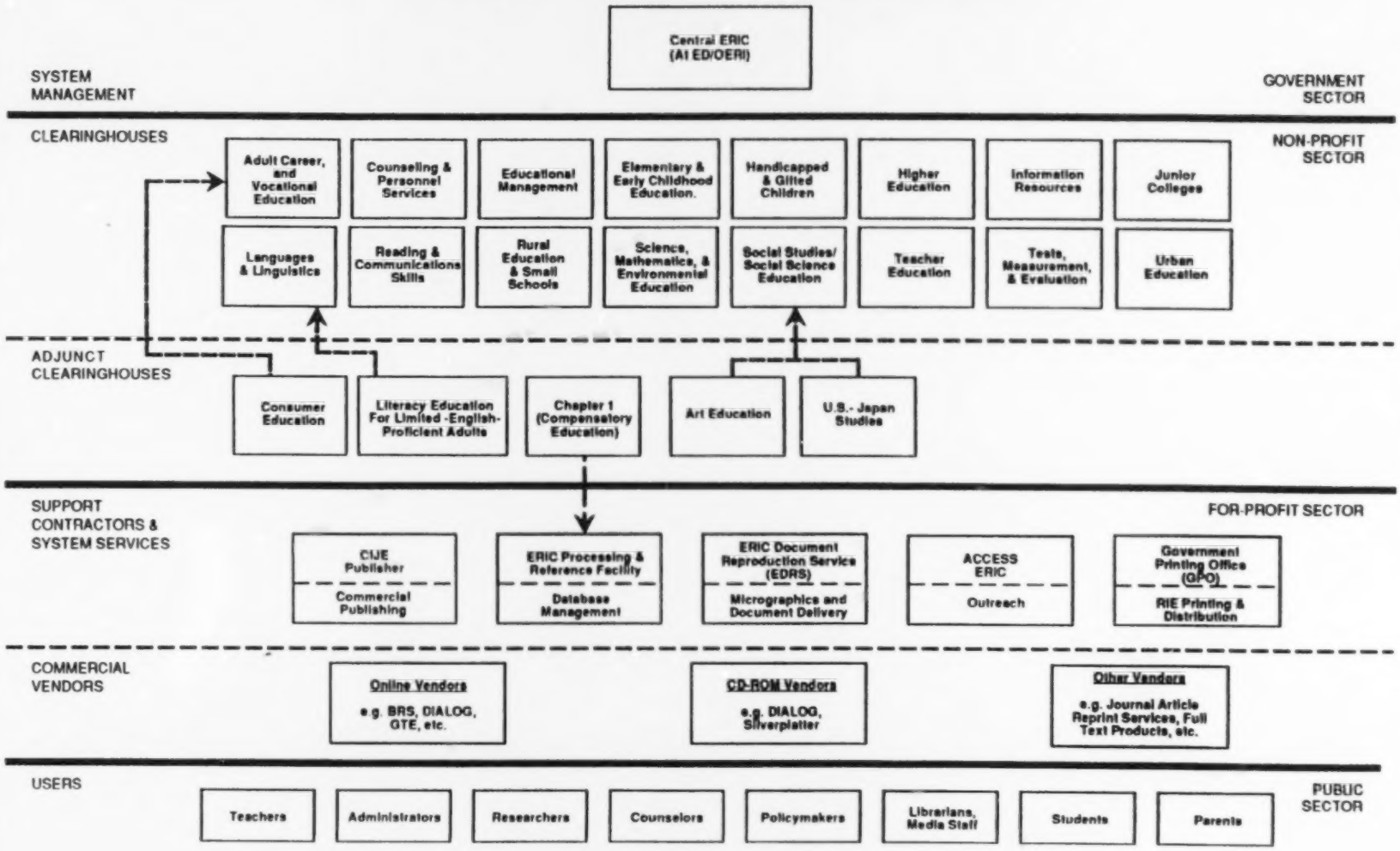

FIGURE I-1: ERIC System Components

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Full mailing addresses, telephone numbers, and staff names/titles for each of the formal ERIC components may be found in the *ERIC Network Directory*, which is revised approximately every six months and distributed throughout the system. Full mailing addresses, telephone numbers, and brief scope notes for all ERIC components can be found in the regularly revised ERIC Ready Reference #6. Full mailing addresses and telephone numbers for the major private sector vendors can be found in the *Pocket Guide to ERIC* brochure.

Each organization is described briefly in this Introduction, highlighting the major functions and responsibilities of each that pertain to database-building. The remainder of the *ERIC Processing Manual* (EPM) consists principally of detailed procedures and guidelines to be followed by the ERIC Clearinghouses in the performance of their database-building related functions.

The internal procedures of the ERIC Facility, ERIC Document Reproduction Service (EDRS), ACCESS ERIC, CIJE Publisher, and Central ERIC, are *not* covered by this *Manual*. Processing interactions among the system components are depicted schematically in **Figure I-2**. An historical introduction to the ERIC system, providing some background and an explanation for the present decentralized structure, is given as **Figure I-3**.

The major database-related products of the ERIC system are:

Resources in Eduction (RIE)
—Monthly abstract journal, covering documents

Current Index to Journals in Education (CIJE)
—Monthly abstract journal, covering journal articles

Thesaurus of ERIC Descriptors
—Subject indexing term authority list (controlled)

Identifier Authority List (IAL)
—Supplementary subject index term list (semi-controlled)

ERIC Database (in machine readable form)
—Magnetic tapes (ERICTAPES)
—Online files
—CD-ROM systems

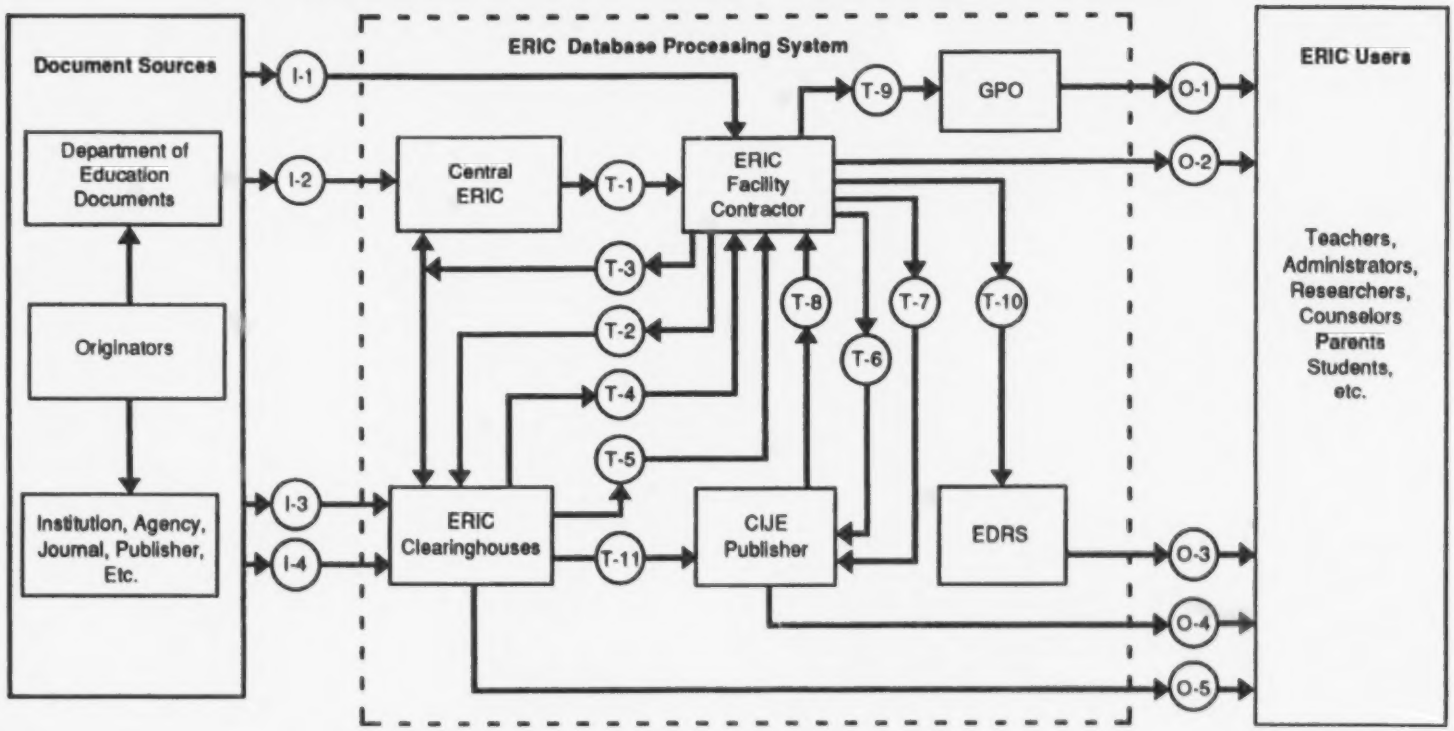
Document Reproduction
—Microfiche
—Paper Copy Blowback

Journal Article Reprints

ERIC Clearinghouse Publications
—Monographs, Reviews, Bibliographies, Syntheses, etc.
—Digests

Section I.C briefly describes each of the above products.

ERIC Database System - Major Processing Interactions



I = Major Inputs

- I-1 Facility Acquisitions Program Receipts (Documents Received via Specific Requests or Automatic Arrangements)
- I-2 Department of Education Documents, Including Those Generated by Contractors and Grantees
- I-3 Documents Acquired by Clearinghouses via Specific Request or Automatic Arrangement
- I-4 Education-Related Journals

T = Major Intra-System Transfers

- T-1 Documents to be Assigned to Clearinghouses
- T-2 Documents That are Within ERIC'S Subject Scope --Assigned to Clearinghouses on the Basis of Individual Clearinghouse Scope of Interest Statements
- T-3 Acquisitions Data Report, Working Copies of Thesaurus and Source Directory, CH/ED Cross-Reference List, Title Index, and other internal tools
- T-4 Accessioned and Processed Documents (not articles)
- T-5 Resumes (Bibliographic Data) for Documents and Articles (Transmitted Online)
- T-6 Unedited CIJE Data (Checked for duplicates and valid index terms)
- T-7 Thesaurus Tapes; RIE Tapes
- T-8 CIJE Tape (Edited data in ERIC format)
- T-9 RIE Tape (Videocomp format)
- T-10 Accessioned Documents and Single-Frame Resumes
- T-11 Notification of Added, Deleted, or Changed Journal Coverage (For CIJE "Source Journal Index")

O = Major Outputs

- O-1 RIE Sales and Distribution
- O-2 ERICTAPES/ERICTOOLS Sales and Distribution
- O-3 Microfiche and Paper Copy Sales and Distribution
- O-4 CIJE Sales and Distribution
- O-5 Clearinghouse Publications Sales and Distribution

FIGURE I-2: ERIC SYSTEM--PROCESSING INTERACTIONS

ERIC *Educational Resources Information Center**

ERIC stands for Educational Resources Information Center. ERIC was originally conceived in the U.S. Office of Education in the mid-1960's as a system for providing ready access to the educational literature. At the time ERIC was first discussed, the literature of education was uncontrolled. Research reports, submitted to OE by their contractors and grantees, received an initial scattered distribution and then essentially disappeared. Reports from other sources generally remained equally inaccessible. ERIC was intended to correct this chaotic situation and to provide a foundation for subsequent information analysis activities and attempts to spread the use of current developments.

Because of the decentralized nature of American education, the many specializations, and the existence of numerous professional organizations, ERIC's designers opted for a network of organizations rather than a single monolithic information center located in Washington. ERIC was conceived, therefore, as a network of "clearinghouses," located across the country in "host" organizations that were already strong in the subfield of education in which they would operate.

Contracts with Clearinghouses originally gave them responsibility for acquiring and selecting all documents in their area and for "processing" these documents. "Processing" includes the familiar surrogation activities of cataloging, indexing, and abstracting. This scheme has worked out very well. Virtually all observers of ERIC have concluded over time that the network of Clearinghouses does a better job of identifying and obtaining the current literature of education than one single information center in Washington could ever do. With their specialized subject expertise, Clearinghouse staff are well qualified to manage ERIC document selection functions. Decentralization has paid off as well for information analysis and user services activities. However, decentralization was not the complete answer. In order to generate products that included the output of all network components, information gathered by the Clearinghouses had to be assembled at one central place. ERIC's final design, therefore, included decentralized Clearinghouse operations integrated around a central computerized facility which serves as a switching center for the network. The data recorded by each of the Clearinghouses are sent to the Facility to form a central database from which publications and indexes are produced.

A similar design decision was made in order to supply the public with copies of reports added to the system. In order for ERIC to make documents available instead of just informing users that a given document existed, it was necessary to provide a document reproduction service from which any non-copyrighted document announced could be obtained. (When permission is obtained, copyrighted materials are also reproduced.) In other words, ERIC was developed as a complete document announcement and retrieval service.

Both of these centralized services had entrepreneurial aspects. The government obviously could not afford to subsidize every user's document needs. The document reproduction effort had to become self-supporting or it would become too expensive within Federal budgets. Therefore, users had to pay for reports they wanted. In the same way, dissemination of the database is not subsidized by the taxpayer; persons wanting ERIC magnetic tapes are required to meet order processing, tape, and duplication costs. The Federal government limits its investment in both areas by generating a fundamental database and then permitting the private sector to market it at prices as advantageous to the public as possible.

In support of this strategy, and also because the centralized operations depended on the use of then advanced technologies (computerized photocomposition and microreprographic technology), these functions were located in the commercial sector.

ERIC, therefore, emerges as a network with four levels. The first or governmental level is represented by Central ERIC (the funder, policy setter, and monitor). The second or non-profit level is made up of 16 Clearinghouses located at universities or professional societies. The third or commercial level consists of the centralized facilities and support contractors for managing the database, putting out published products, making microfiche, and reproducing documents. Fourth are the users (teachers, administrators, researchers, policymakers, counselors, parents, students, etc.) who receive the benefit of these activities.

---

*Now located within:
Office of Educational Research and Improvement (OERI)
Department of Education (ED)
Washington, DC 20208

FIGURE I-3: ERIC--An Historical and Developmental Profile

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B. ERIC System Components

1. Central ERIC

Central ERIC is located within the Office of Educational Research and Improvement (OERI), U.S. Department of Education, and acts as the funding source, policymaker, manager, and monitor of the ERIC system. Activities of all other components of the system are monitored by Central ERIC to ensure contract compliance and quality products and services. ERIC program staff make policy and budget determinations, establish goals and future directions, plan systemwide activities, and approve development of new products and services. All questions relating to basic ERIC policies should be directed to Central ERIC.

2. ERIC Clearinghouses

The ERIC Clearinghouses have responsibility within the network for acquiring the significant educational literature within their particular scope, selecting the highest quality and most relevant material, and processing (i.e., cataloging, indexing, abstracting) the selected items for input to the database. It is these database-building procedures that are covered by this *Manual*. In addition, Clearinghouses provide reference and retrieval services, develop information analysis products, conduct workshops and make presentations, and generate other types of communication links within the educational community. These latter output functions are not covered by this *Manual*.

There are currently sixteen ERIC Clearinghouses located at various points across the United States, each housed at a non-profit institution. The number of Clearinghouses has fluctuated over time, in response to changing educational needs and policies.

The major Clearinghouse functions covered in detail by this *Manual* are as follows:

- Acquisition of Resource Materials (Documents and Journal Articles)

- Selection/Evaluation (Input Screening)
  —Scope (in/out) Determination
  —Quality Level (Sufficient/Insufficient) Determination

- Document Control
  —Duplicate Checking
  —Reproducibility/Legibility Checking
  —Copyright Status Determination
  —Level of Processing Determination (1, 2, or 3)
  —Labeling (Policy and Copyright Labels)
  —Accessioning (Logging, Assigning Clearinghouse Accession Number)

- Document Processing
  —Descriptive Cataloging
  —Abstracting/Annotating
  —Indexing

- Data Entry
- Handling and Shipping
- Vocabulary Maintenance (Suggesting New Index Terms)

The major Clearinghouse functions *not* covered by this *Manual* can be briefly elaborated upon as follows:

- **Developing Clearinghouse Publications**

  Clearinghouse publications may include research reviews, papers summarizing or synthesizing given topics, digests (two-page syntheses, with pointers to additional sources), bibliographies (annotated and unannotated), state-of-the-art papers, monographs, guides to a field or to the literature of a field, and a wide variety of other information analysis publications. The particular products developed by a given Clearinghouse will depend on such factors as: the user group served; priorities established by Clearinghouse staff; Clearinghouse Advisory Board input; Central ERIC and OERI requests, priorities, and initiatives, etc.

- **Providing Reference and Retrieval Services**

  Reference assistance and retrieval services are provided to individual users. These services may include conducting and providing results of literature searches, developing tailored bibliographies, identifying sought-after documents, and providing information on the ERIC system and its use. Referrals to other databases and sources of information are also made.

- User Services

  — **Conducting Workshops and Presentations**

  Clearinghouses conduct workshops and make presentations on how to use the ERIC System and the products generated by the system (including both basic reference tools such as RIE and CIJE, and information analysis products). Education of the user community in order to extend and improve system use is a constant activity.

  — **Developing and Maintaining Linkages with User Groups**

  A number of communication links, procedures, and products have been established by Clearinghouses to provide information to users and to obtain materials from them, e.g., newsletters, articles, regular journal columns, conference participation (including exhibit booths), etc. Professional associations and the various intermediate information transfer units are very helpful in achieving these Clearinghouse objectives.

Each Clearinghouse is identified by a two-character alphabetic prefix and all documents and journal articles processed by the ERIC Clearinghouses for *Resources in Education* (RIE) or *Current Index to Journals in Education* (CIJE) are assigned Clearinghouse Accession Numbers that begin with these prefixes. A complete list of all prefixes used to date (and therefore all ERIC Clearinghouses that have existed to date) appears in **Figure I-4.**

Figure I-5 (ERIC Ready Reference #6) is a complete list of all currently operating ERIC Clearinghouses, together with a brief indication of their respective scopes of interest. The *ERIC Network Directory* provides complete mailing addresses, telephone numbers, and staff names and titles for all Clearinghouses. *Appendix A* of the *EPM*, the *ERIC Clearinghouse Scope of Interest Guide*, provides a fully detailed guide to the subject matter and topical areas covered by each Clearinghouse.

a. Adjunct ERIC Clearinghouses

An *"Adjunct Clearinghouse"* is an organization having a special interest in a topic within a regular ERIC Clearinghouse's scope and willing to affiliate itself with that Clearinghouse, at no cost to ERIC, for the purpose of improving bibliographic control over the literature in its special interest area.

Typically, an Adjunct Clearinghouse collects the specialized literature in its area of interest, processes that literature following ERIC guidelines (i.e., this *Manual*) and then sends the documents or journal articles, together with the results of its processing, to the "parent" ERIC Clearinghouse for its consideration. The ERIC Clearinghouse then applies the same selection criteria, accessioning, and other procedures that it would for any document received; the only difference is that the processing data generated by the Adjunct need only be edited rather than generated "from scratch."

There is no prior commitment that every item input by an Adjunct Clearinghouse will be accepted by ERIC. Adjunct Clearinghouses receive no funds from ERIC, though they generally receive free of charge the regular forms, labels, authority lists, manuals, and reference tools required for ERIC processing.

Adjunct Clearinghouses are a way of improving ERIC's coverage of the literature of education without incurring substantial additional processing costs. There are Adjunct ERIC Clearinghouses on Art Education, United States-Japan Studies, Literacy Education for Limited-English-Proficient Adults, Chapter 1 (Compensatory Education), and Consumer Education. Additional Adjunct Clearinghouses will be "commissioned" as the opportunities arise. (**See Figure I-6** for a list of current Adjunct ERIC Clearinghouses.)

b. ERIC Partners

ERIC Partners are organizations enlisted by the Clearinghouses to aid in the process of disseminating ERIC information and to help provide documents and user feedback for the benefit of the ERIC system. In return, ERIC Partners receive timely distributions of ERIC information and reduced rates on certain products.

ERIC CLEARINGHOUSES--A COMPLETE LIST (WITH PREFIXES)

PREFIX	CLEARINGHOUSE	STATUS
AA	ERIC Facility Contractor (For RIE) CIJE Publisher (For CIJE)	Current
AC	Adult Education	Merged into CE in 1973
AL	Linguistics	Merged into FL in 1971
CE	Adult, Career, and Vocational Education *(including input of Adjunct ERIC Clearinghouse for Consumer Education, since June 1991)*	Current
CG	Counseling and Personnel Services	Current
CS	Reading and Communication Skills	Current
EA	Educational Management	Current
EC	Handicapped and Gifted Children	Current
EF	Educational Facilities	Merged into EA in 1970
EM	Educational Media and Technology	Merged into IR in 1974
FL	Languages and Linguistics *(including input of Adjunct ERIC Clearinghouse on Literacy Education for Limited-English-Proficient Adults, since September 1989)*	Current
HE	Higher Education	Current
IR	Information Resources	Current
JC	Junior Colleges	Current
LI	Library and Information Sciences	Merged into IR in 1974
PS	Elementary and Early Childhood Education	Current
RC	Rural Education and Small Schools	Current
RE	Reading	Merged into CS in 1972
SE	Science, Mathematics, and Environmental Education	Current
SO	Social Science/Social Studies Education *(including input of Adjunct ERIC Clearinghouse for Art Education and Adjunct ERIC Clearinghouse on United States-Japan Studies, since March 1990)*	Current
SP	Teacher Education	Current
TE	Teaching of English	Merged into CS in 1972
TM	Tests, Measurement, and Evaluation	Current
UD	Urban Education	Current
VT	Vocational and Technical Education	Merged into CE in 1973

FIGURE I-4: ERIC CLEARINGHOUSES--A COMPLETE LIST (WITH PREFIXES)

Ready Reference # 6
Revised February 1992

ERIC CLEARINGHOUSES *(and Other Network Components)*

The ERIC Clearinghouses have responsibility within the network for acquiring the significant educational literature within their particular areas, selecting the highest quality and most relevant material, processing (i.e., cataloging, indexing, abstracting) the selected items for input to the database, and also for providing information analysis products and various user services based on the database.

The exact number of Clearinghouses has fluctuated over time in response to the shifting needs of the educational community. There are currently 16 Clearinghouses. These are listed below, together with full addresses, telephone numbers, and brief scope notes describing the areas they cover.

ERIC Clearinghouse on *Adult, Career, and Vocational Education* (CE)
Ohio State University
Center on Education and Training for Employment
1900 Kenny Road
Columbus, Ohio 43210-1090
Telephone: (614) 292-4353;
(800) 848-4815 Fax: (614) 292-1260

All levels of adult and continuing education from basic literacy training through professional skill upgrading. The focus is upon factors contributing to the purposeful learning of adults in a variety of life situations usually related to adult roles (e.g., occupation, family, leisure time, citizenship, organizational relationships, retirement, and so forth).

ERIC Clearinghouse on *Counseling and Personnel Services* (CG)
University of Michigan
School of Education, Room 2108
610 East University Street
Ann Arbor, Michigan 48109-1259
Telephone: (313) 764-9492 Fax: (313) 747-2425

Preparation, practice, and supervision of counselors at all educational levels and in all settings. Theoretical development of counseling and guidance, including the nature of relevant human characteristics. Use and results of personnel practices and procedures. Group process (counseling, therapy, dynamics) and case work.

ERIC Clearinghouse on *Educational Management* (EA)
University of Oregon
1787 Agate Street
Eugene, Oregon 97403-5207
Telephone: (503) 346-5043 Fax: (503) 346-5890

All aspects of the governance, leadership, administration, and structure of public and private educational organizations at the elementary and secondary levels, including the provision of physical facilities for their operation.

ERIC Clearinghouse on *Elementary and Early Childhood Education* (PS)
University of Illinois
805 W. Pennsylvania Avenue
Urbana, Illinois 61801-4897
Telephone: (217) 333-1386 Fax: (217) 333-3767

All aspects of the physical, cognitive, social, emotional, educational, and cultural development of children, from birth through early adolescence. Among the topics covered are: prenatal and infant development and care; parent education; home and school relationships; learning theory research and practice related to children's development; preparation of early childhood teachers and caregivers; and educational programs and community services for children.

ERIC Clearinghouse on *Handicapped and Gifted Children* (EC)
Council for Exceptional Children
1920 Association Drive
Reston, Virginia 22091-1589
Telephone: (703) 264-9474 Fax: (703) 264-9494

All aspects of the education and development of persons (of all ages) who have disabilities or who are gifted, including the delivery of all types of education-related services to these groups. Includes prevention, identification and assessment, intervention, and enrichment for these groups, in both regular and special education settings.

ERIC Clearinghouse on *Higher Education* (HE)
George Washington University
One Dupont Circle, N.W., Suite 630
Washington, D.C. 20036-1183
Telephone: (202) 296-2597 Fax: (202) 296-8379

All aspects of the conditions, programs, and problems of colleges and universities providing higher education (i.e., four-year degrees and beyond). This includes: governance and management; planning; finance; inter-institutional arrangements; business or industry programs leading to a degree; institutional research at the college/university level; Federal programs; legal issues and legislation; professional education (e.g., medicine, law, etc.) and professional continuing education.

ERIC Clearinghouse on *Information Resources* (IR)
Syracuse University
Huntington Hall, Room 030
800 University Avenue
Syracuse, New York 13244-2340
Telephone: (315) 443-3640 Fax: (315) 443-5732

Educational technology and library/information science at all academic levels and with all populations, including the preparation of professionals. The media and devices of educational communication, as they pertain to teaching and learning (in both conventional and distance education settings). The operation and management of libraries and information services. All aspects of information management and information technology related to education.

ERIC Clearinghouse for *Junior Colleges* (JC)
University of California at Los Angeles (UCLA)
Math-Sciences Building, Room 8118
405 Hilgard Avenue
Los Angeles, California 90024-1564
Telephone: (310) 825-3931 Fax: (310) 206-8095

Development, administration, and evaluation of two-year public and private community and junior colleges, technical institutes, and two-year branch university campuses. Two-year college students, faculty, staff, curricula, programs, support services, libraries, and community services. Linkages between two-year colleges and business/industrial/community organizations. Articulation of two-year colleges with secondary and four-year postsecondary institutions.

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ERIC Clearinghouse on *Languages and Linguistics* (FL)
Center for Applied Linguistics
1118 22nd Street, N.W.
Washington, D.C. 20037-0037
Telephone: (202) 429-9551 Fax: (202) 429-9766
Languages and language sciences. All aspects of second language instruction and learning in all commonly and uncommonly taught languages, including English as a second language. Bilingualism and bilingual education. Cultural education in the context of second language learning, including intercultural communication, study abroad, and international educational exchange. All areas of linguistics, including theoretical and applied linguistics, sociolinguistics, and psycholinguistics.

ERIC Clearinghouse on *Reading and Communication Skills* (CS)
Indiana University, Smith Research Center
2805 East 10th Street, Suite 150
Bloomington, Indiana 47408-2698
Telephone: (812) 855-5847 Fax: (812) 855-7901
Reading and writing, English (as a first language), and communications skills (verbal and nonverbal), kindergarten through college. Includes family or intergenerational literacy. Research and instructional development in reading, writing, speaking, and listening. Identification, diagnosis, and remediation of reading problems. Speech communication (including forensics), mass communication (including journalism), interpersonal and small group interaction, oral interpretation, rhetorical and communication theory, and theater/drama. Preparation of instructional staff and related personnel in all the above areas.

ERIC Clearinghouse on *Rural Education and Small Schools* (RC)
Appalachia Educational Laboratory
1031 Quarrier Street
P.O. Box 1348
Charleston, West Virginia 25325-1348
Telephone: (800) 624-9120 (Outside WV)
(800) 344-6646 (In WV) Fax: (304) 347-0487
Curriculum and instructional programs and research/evaluation efforts that address the education of students in rural schools or districts, small schools wherever located, and schools or districts wherever located that serve American Indian and Alaskan natives, Mexican Americans, and migrants, or that have programs related to outdoor education. Includes the cultural, ethnic, linguistic, economic, and social conditions that affect these educational institutions and groups. Preparation programs, including related services, that train education professionals to work in such contexts.

ERIC Clearinghouse for *Science, Mathematics, and Environmental Education* (SE)
Ohio State University
1200 Chambers Road, Room 310
Columbus, Ohio 43212-1792
Telephone: (614) 292-6717 Fax: (614) 292-0263
Science, mathematics, engineering/technology, and environmental education at all levels. The following topics when focused on any of the above broad scope areas: applications of learning theory; curriculum and instructional materials; teachers and teacher education; educational programs and projects; research and evaluative studies; applications of educational technology and media.

ERIC Clearinghouse for *Social Studies/Social Science Education* (SO)
Indiana University
Social Studies Development Center
2805 East 10th Street, Suite 120
Bloomington, Indiana 47408-2698
Telephone: (812) 855-3838 Fax: (812) 855-7901
All aspects of Social Studies and Social Science Education, including values education (and the social aspects of environmental education and sex education), international education, comparative education, and cross-cultural studies in all subject areas (K-12). Ethnic heritage, gender equity, aging, and social bias/discrimination topics. Also covered are music, art, and architecture as related to the fine arts.

ERIC Clearinghouse on *Teacher Education* (SP)
American Association of Colleges for Teacher Education (AACTE)
One Dupont Circle, N.W., Suite 610
Washington, D.C. 20036-1186
Telephone: (202) 293-2450 Fax: (202) 457-8095
School personnel at all levels. Teacher recruitment, selection, licensing, certification, training, preservice and inservice preparation, evaluation, retention, and retirement. The theory, philosophy, and practice of teaching. Organization, administration, finance, and legal issues relating to teacher education programs and institutions. All aspects of health, physical, recreation, and dance education.

ERIC Clearinghouse on *Tests, Measurement, and Evaluation* (TM)
American Institutes for Research (AIR)
Washington Research Center
3333 K St., N.W.
Washington, DC 20007-3541
Telephone: (202) 342-5060 Fax: (202) 342-5033
All aspects of tests and other measurement devices. The design and methodology of research, measurement, and evaluation. The evaluation of programs and projects. The application of tests, measurement, and evaluation devices/instrumentation in educational projects and programs.

ERIC Clearinghouse on *Urban Education* (UD)
Teachers College, Columbia University
Institute for Urban and Minority Education
Main Hall, Room 300, Box 40
525 W. 120th Street
New York, New York 10027-9998
Telephone: (212) 678-3433 Fax: (212) 678-4048
The educational characteristics and experiences of the diverse racial, ethnic, social class, and linguistic populations in urban (and suburban) schools. Curriculum and instruction of students from these populations and the organization of their schools. The relationship of urban schools to their communities. The social and economic conditions that affect the education of urban populations, with particular attention to factors that place urban students at risk educationally, and ways that public and private sector policies can improve these conditions.

Educational Resources Information Center (Central ERIC)
U.S. Department of Education
Office of Educational Research and Improvement (OERI)
555 New Jersey Ave., N.W.
Washington, D.C. 20208-5720
Telephone: (202) 219-2289 Fax: (202) 219-1817

ERIC Processing & Reference Facility
ARC Professional Services Group
Information Systems Division
1301 Piccard Drive, Suite 300
Rockville, Maryland 20850-4305
Telephone: (301) 258-5500 Fax: (301) 948-3695

ERIC Document Reproduction Service (EDRS)
Cincinnati Bell Information Systems (CBIS) Federal
7420 Fullerton Road, Suite 110
Springfield, Virginia 22153-2852
Telephone: (703) 440-1400
(800) 443-ERIC Fax: (703) 440-1408

Oryx Press
4041 North Central Avenue at Indian School, Suite 700
Phoenix, Arizona 85012-3397
Telephone: (602) 265-2651
(800) 279-6799 Fax: (602) 265-6250

ACCESS ERIC
Aspen Systems Corporation
1600 Research Boulevard
Rockville, Maryland 20850-3166
Telephone: (301) 251-5045
(800) 873-3742 Fax: (301) 251-5212

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ADJUNCT ERIC CLEARINGHOUSES

	Adjunct To
Adjunct ERIC Clearinghouse for Art Education (AR) Indiana University Social Studies Development Center 2805 East 10th Street, Suite 120 Bloomington, Indiana 47408-2373 (812) 855-3838	ERIC/SO
Adjunct ERIC Clearinghouse on Chapter 1 (CHP-1) Chapter 1 Technical Assistance Center PRC Inc. 2601 Fortune Circle East One Park Fletcher Building Suite 300-A Indianapolis, Indiana 46241 (317) 244-8160	ERIC Facility
Adjunct ERIC Clearinghouse on Consumer Education (CN) National Institute for Consumer Education 207 Rackham Building, West Circle Drive Eastern Michigan University Ypsilanti, Michigan 48197 (313) 487-2292	ERIC/CE
Adjunct ERIC Clearinghouse for United States-Japan Studies Indiana University Social Studies Development Center 2805 East 10th Street, Suite 120 Bloomington, Indiana 47408-2373 (812) 855-3838	ERIC/SO
Adjunct ERIC Clearinghouse on Literacy Education for Limited-English-Proficient Adults (LE) Center for Applied Linguistics (CAL) 1118 22nd Street, NW Washington, DC 20037 (202) 429-9292	ERIC/FL

FIGURE I-6: ADJUNCT ERIC CLEARINGHOUSES

ERIC Partners are, in many cases, the same organizations as listed in the microfiche Standing Order Customer (SOC) lists, the RIE/CIJE Subscriber lists, the ERIC Acquisitions Arrangements list, and the *Directory of ERIC Information Service Providers*. The concept of being an *"ERIC Partner"* is, to a certain extent, simply a formalization of a relationship that may already have existed informally for years. Except for their role as potential sources of documents, ERIC Partners are not involved in the formal process of building the ERIC database and none of their functions are covered in this *Manual*.

3. Support Contractors

a. ERIC Processing and Reference Facility

The ERIC Processing and Reference Facility is a centralized processing facility serving all components of the ERIC network, i.e., Central ERIC, the decentralized Clearinghouses, ERIC Document Reproduction Service, ACCESS ERIC, and the various vendor organizations, such as the CIJE Publisher. It is under the policy direction of Central ERIC. Services provided by the ERIC Facility include:

- Acquisition and assignment (of documents);
- Authority list maintenance;
- Computer processing;
- Data preparation and correction;
- Database management;
- Document control;
- Document processing (cataloging, indexing, abstracting);
- Duplicate checking;
- Editorial review;
- Handing and shipping;
- Lexicography;
- Photocomposition and publication preparation;
- Programming;
- Reference responses; and
- System and file maintenance.

The Facility prepares and delivers a variety of products and publications from the ERIC database. These include, among others:

- ***Resources in Education (RIE),***
  ERIC's monthly abstract journal covering documents;

- ***Thesaurus of ERIC Descriptors,***
  The controlled subject indexing vocabulary of the ERIC database; an authority list of permissible subject index terms, (mostly conceptual in nature) in alphabetic, rotated, and hierarchical displays;

- ***ERIC Source Directory,***
  An authority list of the names of organizations preparing and sponsoring documents contributed to the ERIC system;

- ***ERIC Title Index (RIE only),***
  An alphabetic list of the titles of all documents added to the RIE portion of the ERIC database, in alphabetic and category displays;

- ***Identifier Authority List (IAL)***
  A semi-controlled subject indexing vocabulary that supplements the *Thesaurus* by being an authority list of the names of things (e.g., projects, persons, places, equipment, laws, works of art, theories, etc.) that are the subjects of documents in the ERIC database, in alphabetic and category displays;

- ***Clearinghouse Number/ED Number Cross-Reference List,***
  A cross-reference between the Clearinghouse temporary accession number and the final ED number assigned to the document;

- ***ERIC Administrative Bulletin (EAB),***
  The internal "house organ" of the ERIC system, containing all news and documentation pertaining to operation of the ERIC system;

- ***ERIC Network Directory***
  The internal telephone directory for the ERIC system, listing all addresses, telephone numbers, 800 numbers, FTS numbers, FAX numbers, staff names, staff titles, working hours, monitors, SOC responsibilities, state responsibilities, language bank, committee/task force memberships, and contact points for special purposes;

- ***Bibliography of Publications About ERIC***
  A bibliography done approximately every three years containing citations for writings where ERIC is the subject;

- ***ERIC Clearinghouse Publications***
  An annual bibliography of all ERIC Clearinghouse publications input to the ERIC database in the past year.

Staff of the Facility serve ERIC in an advisory capacity, participate in all technical and database user meetings, and perform analyses of the database. A heavy emphasis is placed by the Facility on scheduling, statistical reporting, quality control, and cost accounting.

The major Facility functions covered by this Manual are as follows:

- ***Acquisition and Assignment of Documents (for RIE)***
  The ERIC Facility performs an acquisitions functions principally aimed at obtaining education-related documents from Government agencies and from foreign and international organizations. For these sources of documents, the Clearinghouses are directed to work through the Facility. Documents obtained from these efforts, as well as documents originated or otherwise obtained directly by the U.S. Department of Education, are assigned by the Facility to the appropriate Clearinghouse in accordance with the Clearinghouse statements of scope (**see Appendix A**). The Facility does not exercise an evaluation/selection function.

- ***Handling and Shipping***
  Each shipment of documents from the Clearinghouses to the Facility is checked against the accompanying log sheet to verify completeness of the shipment. The documents are then checked to ensure attachment of the appropriate policy statements and reproduction releases and are paginated for filming purposes. The documents and accompanying logsheets are put with their respective bibliographic resumes and then forwarded for editing of the Clearinghouse processing work.

- ***Data Entry***
  The Facility receives online weekly transmissions of bibliographic data from the Clearinghouses, including bibliographic citations or "resumes" for both RIE and CIJE, the full text of ERIC Digests, as well as the in-progress data for the *Acquisitions Data Report* (ADR), for use in duplicate checking.

- ***Editing***
  Documents and completed resume forms, for which processing has been accomplished by the Clearinghouses, are received by the editors and checked to ensure completeness and correctness of all entries and compliance with the cataloging, indexing, and abstracting provisions of the *ERIC Processing Manual* (EPM).

- ***Vocabulary Maintenance***
  The ERIC Facility Lexicographer, with the assistance of a nationwide Vocabulary Review Group (VRG), reviews all proposed Descriptors recommended by the Clearinghouses, approving or denying each term. Descriptor Scope Notes (definitions) and cross-reference structures are refined, if necessary. Similarly, all suggestions for changes of existing terminology are reviewed for feasibility, advisability, impact, and compliance with the *"Vocabulary Development and Maintenance"* section of the EPM.

The major Facility functions *not* covered by this Manual are as follows:

- ***Distribution of Documents***
  Includes complimentary distribution of RIE and CIJE and distribution of ERIC-related handout and exhibit materials.

- ***Reference Responses and User Services***
  General information about the ERIC system and ordering information for specific sought-after documents is provided to a wide variety of users who have directed their inquiries to the Department of Education, Central ERIC, GPO, LC, etc. Systemwide *"Reference and User Services"* procedures are covered in a separate manual by that name. Referrals are made when appropriate.

- ***Computer Searches***
  Computer searches of the ERIC database (RIE and CIJE) are made at the request of Central ERIC and in support of regular ERIC Facility functions, e.g., Acquisitions, Lexicography.

- ***Computer Processing***
  RIE and CIJE final edited and corrected data in machine-readable form are used to update the ERIC master magnetic tape and direct access computerized files. Various publications and indexes are generated from these files via a series of computer programs (documented in the *ERIC System Documentation*).

- ***ERICTAPES/ERICTOOLS Project***
  The ERIC Facility Contractor is authorized by Central ERIC to copyright the ERIC database and to make the ERIC database, and various internal ERIC reference publications, e.g., *Title Index*, available to the public via a self-sustaining program not requiring Government subsidy. The publications are sold. The tapes are licensed and involve a usage fee for commercial vendors of 10%.

b. ERIC Document Reproduction Service (EDRS)

EDRS is the document delivery component of the ERIC network. All non-copyrighted documents (and any others for which reproduction permission has been obtained) announced in *Resources in Education* are forwarded from the ERIC Facility to EDRS, where they are microfilmed and converted into microfiche (4" x 6" flat sheets of microfilm) according to Federal and national standards.

Interested users may obtain copies of ERIC documents from EDRS in either microfiche (at 24X reduction) or paper copy blowback (at 100% original size). Orders are accepted on either an on-demand or subscription basis. Subscribers may order the entire microfiche collection (monthly this amounts to approximately 1,000 titles contained on about 1,300 microfiche) or subsets of the entire collection (such as all the titles input by a particular Clearinghouse). There are currently over 800 organizations that subscribe to the entire ERIC microfiche collection on a continuing basis. These are made up of Federal agencies, universities and colleges, state and local education agencies, school systems, professional associations, non-profit groups, etc. There are over 100 subscriptions from foreign countries. Individual users consist of teachers, students, researchers, planners, administrators, counselors, therapists, and numerous other members of the educational community. Each document announced in *Resources in Education* carries with it an EDRS price code (or alternate source of availability):

(1) Individual on-demand *microfiche* are sold at a price of $1.16 per title, as long as the document fits on five cards or less (i.e., is 480 pages or less). The price increases $0.25 for each additional card (i.e., 96 page increment or fraction thereof) required.

(2) Individual on-demand blowback *paper copies* are sold on a price scale beginning at $3.20 for 1-25 pages and rising $3.20 for each additional 25 page increment (or fraction thereof).

Microfiche may be purchased on a standing order basis at a bargain price (encouraging subscriptions) of $.138 per microfiche, or about $2,000 a year for around 17,000 microfiche. Prices are subject to change so it is important to always consult the EDRS Order Form for full current price information.

None of the functions performed by EDRS are covered by the EPM (with the exception of post-publication changes to the microfiche (see Section X.)

c. ***ACCESS ERIC***

The ACCESS ERIC contractor specializes in all forms of outreach (e.g., dissemination, publicity, promotion, advertising, public relations, referrals, exhibits, user training, systemwide brochures, directories, etc.). ACCESS ERIC is not involved in the processing that generates the ERIC database, but rather in directing users in the use of the database once it has been created.

The major products of ACCESS ERIC are: *The ERIC Review*; *ERIC Calendar of Education-Related Conferences*; *ERIC Directory of Education-Related Information Centers*; *Directory of ERIC Information Service Providers*; *Catalog of ERIC Clearinghouse Publications* (i.e., those still in-print); *Interchange* (newsletter).

None of the functions performed by ACCESS ERIC are covered in this *Manual*.

d. ***U.S. Government Printing Office (GPO)***

The U.S. Government Printing Office receives each month from the ERIC Facility a magnetic tape containing the contents of an issue of RIE. Using the Videocomp high-speed photocomposition device, GPO composes camera-ready made-up pages for the issue, and prints and binds sufficient copies to handle subscription, complimentary distribution, and on-demand order requirements. All subscriptions to RIE and all initial distributions to paid subscribers, are handled by GPO. Complimentary distribution is handled by the ERIC Facility. On-demand orders for single copies or the semiannual cumulative index are handled by GPO as long as the supply lasts (usually 3-4 months following publication). Annual cumulations of both RIE abstracts and indexes are reprinted in hardbound form by the CIJE Publisher.

None of the functions performed by GPO are covered in this *Manual*.

4. Private Sector Vendors

a. *Current Index to Journals in Education* (CIJE) Publisher

CIJE was begun in 1969 as an early joint venture between ERIC and the commercial publishing realm to expand the scope of the ERIC database to include the major journals in the field of education. In addition to this index to journal literature in the field of education, the CIJE Publisher serves as the major commercial hardbound publisher utilizing the ERIC database for the preparation of a variety of publications, e.g., annual RIE cumulations, *Thesaurus of ERIC Descriptors*, etc.

- ***Selection Acquisition, and Assignment of Journals to be Covered by CIJE***
  Journals to be covered, either comprehensively or selectively, are recommended by Clearinghouses, subject to the approval of Central ERIC. Clearinghouses are assigned journals on the basis of their scope of interest. The "official" list of journals regularly covered by the ERIC Clearinghouses is maintained by the CIJE Publisher and is printed in each issue of CIJE as the "*Source Journal Index.*"

- ***Input Screening***
  Clearinghouses transmit completed resumes for journal articles to the ERIC Facility. The Facility converts the data to ERIC format and sends the resultant tape to the CIJE Publisher, where the data and records are checked against the accompanying log sheet to verify completeness of the shipment.

- ***Editing***
  All completed journal article resumes are edited by the CIJE publisher to ensure accuracy, completeness, and compliance with the cataloging, abstracting/annotating, and indexing sections of this *Manual*.

The major CIJE Publisher functions *not* covered by this *Manual* are as follows:

- Computer Processing (to produce CIJE)
- CIJE Marketing, Sales, Distribution

b. *Online Access Vendors*

There are several vendors in the business of offering the public online access to bibliographic databases. Several of these vendors obtain the ERIC database (on a monthly basis) from the ERIC Facility (under terms of the ERICTAPES project) and make it available to users on a worldwide basis via their respective proprietary search and retrieval systems. The major such online vendors currently are: BRS, DIALOG, and GTE Education Services. (See *Pocket Guide to ERIC* or *All About ERIC* brochures for vendor addresses and telephone numbers.)

The online vendors are not involved in the processing that creates the ERIC database and are not covered by the EPM.

c. ***CD-ROM System Vendors***

Several vendors have created stand-alone CD-ROM-based retrieval systems that can access the ERIC database. These vendors obtain the ERIC database (usually on a quarterly basis) from the ERIC Facility (under terms of the ERICTAPES project) and make it available to users worldwide on a subscription basis via their respective proprietary search and retrieval systems. The major CD-ROM vendors currently are: DIALOG and SilverPlatter.

The CD-ROM vendors are not involved in the processing that creates the ERIC database and are not covered by the EPM.

d. ***Journal Article Reprint Services***

The journal articles announced in CIJE generally come from copyrighted professional journals and, because of publisher restrictions, cannot be reduced to microfiche by ERIC as readily as the documents announced in RIE. For this reason, ERIC does *not* attempt to film journal articles or to itself provide "document delivery" for CIJE journal article reprints. Instead ERIC refers users either to libraries (generally university or college libraries) that subscribe to the journals involved, or to a few commercial services that provide journal article reprints for a fee. (See brochures referred to above for addresses and telephone numbers.)

Two of the major journal article reprint services are:

(1) University Microfilms International (UMI), Article Clearinghouse; and

(2) Institute for Scientific Information (ISI), Genuine Article Service.

Journal article reprint vendors are not involved in the processing that generates the ERIC database and are *not* covered by the EPM.

C. *Major ERIC Products*

A large number of information products result from the efforts of the various members of the ERIC network and its vendors. The major products are described briefly below. Since prices are subject to periodic change without advance notice, the reader should be alert to this possibility.

1. ***Resources in Education*** **(RIE)**

RIE is a paperbound monthly (12 issues per year) abstract journal that announces reports and documents dealing with all aspects of education, i.e., research reports, program descriptions, instructional materials. RIE consists of a resume section of document abstracts, and index sections consisting of separate Subject, Author, Institution, Publication Type, and Clearinghouse Number-to-ED-Number Indexes. Paperbound semiannual indexes are available for January-June and July-December each year from GPO. An annual cumulation of both resumes and indexes is available from the CIJE Publisher. Each monthly issue announces approximately 1,000 items.

RIE is directed at the entire educational community, e.g., school administrators, teachers, supervisors, school board members, educational researchers, students, librarians, professional educators, parents, etc.

RIE is available from the U.S. Government Printing Office, Washington, DC 20402. The current annual subscription price for the journal in the U.S. is $94 per year, exclusive of the semiannual cumulative index.

2. ***Current Index to Journals in Education*** **(CIJE)**

CIJE is a paperbound monthly (12 issues per year) index journal that announces journal articles from over 700 education and education-related journals. CIJE is made up of a main entry section, consisting of bibliographic information and up to 50-word annotations for most articles; an index section, consisting of separate Subject and Author indexes; and a journal contents section arranged by journal title and showing the articles accessioned from each journal issue. Semiannual cumulations are available (cumulating both the announcement section and indexes). Each issue announces approximately 1,500 items.

CIJE is directed at the entire educational community.

CIJE is available currently from Oryx Press (for current address, always consult the *ERIC Directory* or RIE). The current annual subscription price for the journal in the U.S. is $225 per year, exclusive of cumulations.

3. ***Thesaurus of ERIC Descriptors***

The *Thesaurus of ERIC Descriptors* contains the basic vocabulary used by the ERIC system for the indexing of documents and journal articles. It contains 10,000 vocabulary terms, including approximately 5,600 Main Terms and 4,400 Synonyms cross-referenced to the Main Terms. Scope Notes (definitions) or parenthetical qualifiers are provided for all non-obvious terms. Hierarchical and other relationships among terms are indicated by the standard "*Narrower Term*," "*Broader Term*," "*Related Term*" notations. The postings count (i.e., the number of documents/articles to which each descriptor has been assigned) is also included.

The *Thesaurus* is maintained and updated regularly by the ERIC Facility, largely on the basis of input from the ERIC Clearinghouses and the 29-member nationwide Vocabulary Review Group (**see Section VIII, Part 1, for details**). New terms and changes are announced in the back sections of RIE and CIJE. A "Working Copy" is produced periodically by the Facility for the use of the Clearinghouse indexers. The *Thesaurus* is formally published (at least quadrennially) for public sale by the CIJE Publisher.

4. ***ERIC Identifier Authority List* (IAL)**

The *ERIC Identifier Authority List* is a semi-controlled list of approximately 44,000 words and phrases authorized for subject-indexing use, but which, unlike Descriptors, do not appear in the vocabulary of the controlled *ERIC Thesaurus*. Identifiers are usually proper nouns (e.g., names of people, projects, geographic locations, organizations, tests, literary works, computer programs), which because of their nearly infinite numbers, are generally not appropriate for Thesaurus consideration; however, they can also be generic concepts appearing infrequently or newly in the ERIC literature and under consideration for Descriptor status.

The *IAL*, maintained by the ERIC Facility, is a total list of the *preferred* Identifier forms in the ERIC database and serves as a companion volume of the *ERIC Thesaurus*. It is presented in two displays: a main *Alphabetical Display* of preferred Identifiers (A to Z) and the postings of each term; a supplemental *Category Display* listing the Identifiers alphabetically within 20 broad categories (e.g., laws/legislation, science & technology, tests/testing). The two displays are available separately from the ERIC Facility. A one-volume version is also available from the commercial CIJE Publisher, beginning in 1992.

5. ***ERIC Database in Machine-Readable Form***

a. **Magnetic Tapes (ERICTAPES)**

ERICTAPES are magnetic tape copies of the files of bibliographic data assembled by the ERIC System. A number of different files, in a variety of formats, are offered by the ERIC Facility. The most popular files are the sequential Master Files containing the records announced in *Resources in Education* and in *Current Index to Journals in Education*; however, the inverted subject index files and the *Thesaurus* file have also been widely disseminated.

An ERIC Digest Online (EDO) tape is available containing regular bibliographic records for ERIC Digests each followed by the complete full text of the Digest described.

The files are made available on 9-track tape reels (600-, 1200-, or 2400-foot, as appropriate), at packing densities of either 1600 BPI or 6250 BPI. The tapes are unlabeled and in IBM Operating System (OS) format in EBCDIC code. Both "Upper Case Only" and "Upper and Lower Case" character sets are offered.

Detailed information on the various files, formats, and ordering options, along with price lists, can be obtained from the ERIC Facility Contractor.

b. ***Online Files***

Private sector vendors of online access to bibliographic database files obtain copies of the ERIC database and its updates by subscribing to "ERICTAPES" from the ERIC Facility.

These files are then mounted on large mainframe computers and the public may purchase access to them, using the vendor's proprietary search and retrieval software. All that is needed is a computer terminal equipped with a modem. Charges are usually based on amount of use, that is, connect time (e.g., $35/hr.) and number of citations printed (e.g., $.010 per "hit").

The three major domestic online vendors of the ERIC database are: BRS, DIALOG, and GTE Education Services. In addition, many universities also provide ERIC online services to their faculty and students. Current addresses and telephone numbers for all commercial online vendors can be found in the *Pocket Guide to ERIC*. Current addresses and telephone numbers for all non-profit providers of ERIC online services can be found in the *Directory of ERIC Information Service Providers*.

c. ***CD-ROM Systems***

Private sector vendors of stand-alone CD-ROM systems offering the ERIC database obtain copies of the ERIC database and its updates by subscribing to "ERICTAPES" from the ERIC Facility.

These files are then converted to CD-ROM files and copied in quantity. The public may purchase a subscription to the ERIC database on one or two "archival" discs, supplemented (usually quarterly) by a regularly-updated "current" disc, usually containing data for most of the last decade. All that is needed for use is a microcomputer equipped with a CD-ROM data disc drive.

Charges vary among vendors, but are generally in the neighborhood of $500 per year, with no additional charges based on usage.

The major domestic CD-ROM vendors of the ERIC database are: DIALOG and SilverPlatter. Current addresses and telephone numbers for all CD-ROM vendors can be found in the *Pocket Guide to ERIC*.

6. Document Reproductions

a. Microfiche

A microfiche is a sheet of microfilm approximately 4" x 6", on which up to 98 pages of text are reproduced (at 24X reduction). Only the data on the header strip of a microfiche (containing accession number, title, author, etc.) are eye-legible. A special enlarging microfiche reader is necessary to read the page images; a microfiche reader/printer is necessary to blowback full size paper copies of the document pages; a microfiche duplicator is necessary in order to prepare duplicate microfiche.

Documents are announced in RIE at one of three possible "Levels":

(1) **Level 1:** documents are available in both microfiche and reproduced paper copy;

(2) **Level 2:** documents are available in microfiche (and will be available in the archival media that succeed microfiche), but are not available in reproduced paper copy;

(3) **Level 3:** documents are not available at all from EDRS, but an alternate source of availability is cited in the RIE announcement.

Less than 3% of the items announced in RIE are Level 3; all others may be obtained in microfiche form from EDRS.

A single title that will fit on five microfiche or less (i.e., 480 page or less) costs $1.16. The price increases at a rate of $0.25 for each additional microfiche required (i.e., 96 page increment or less). Standing orders to obtain the entire ERIC document collection on microfiche are available from EDRS for approximately $2,000 per year.

EDRS prices are subject to change. Users should always check the latest RIE or EDRS Order Form to determine current prices.

b. *Paper Copy (PC) Reproductions*

Paper Copy refers to a paper reproduction (usually at 100% of original size) of an original document. All Level 1 documents announced in RIE (about 85% of the announcements) are available from EDRS in paper copy.

Paper copy reproductions are sold on a graduated scale dependent on size at a rate of $3.20 per 25 page (or less) increment. See EDRS Order Form in most recent issue of RIE for current price.

7. ***Journal Article Reprints***

ERIC provides for document delivery of the documents announced in *Resources in Education* (RIE), but does not itself provide for delivery of copies of the journal articles announced in *Current Index to Journals in Education* (CIJE). Instead, ERIC relies on private journal article reprint services that have established mechanisms or relationships for reimbursing journal publishers for the photocopying of their usually copyrighted material. (Users also have the option, of course, of consulting such articles in the collections of academic libraries, or other research libraries that subscribe to them.)

Two of the most well-known reprint services are: (1) University Microfilms International (UMI), Article Reprint Service; and (2) Institute for Scientific Information (ISI), Genuine Article Service. Charges are typically around $15.00 per article. The addresses and telephone numbers of the above journal article reprint services can be found in the *Pocket Guide to ERIC*.

8. **ERIC Clearinghouse Publications**

a. **Monographs, Reviews, Bibliographies, Syntheses, etc.**

In addition to collecting the literature of education for announcement in RIE and CIJE, the ERIC Clearinghouses analyze and synthesize the literature into research reviews, bibliographies, state-of-the-art studies, interpretive studies on topics of high current interest, and many similar documents designed to meet the information needs of ERIC users. These publications are announced in RIE and are available in the ERIC microfiche collections provided by the ERIC Document Reproduction Service (EDRS).

Annually, the ERIC Facility prepares a bibliography that lists and indexes all the ERIC Clearinghouse publications announced during the prior year. Typically, this publication contains around 200 entries per year. Annually, ACCESS ERIC prepares a catalog of all ERIC Clearinghouse publications (from all prior years) that are still in-print and available from the Clearinghouses.

b. **Digests**

ERIC Digests are a specific type of ERIC Clearinghouse publication that has become increasingly popular with the user population during the last few years and that has therefore been given more emphasis recently in Clearinghouse publication planning.

ERIC Digests are short reports (1,000-1,500 words on one or two pages) on topics of current interest in education. They are designed to provide an overview of information on a given topic, plus references to items offering more detailed information. They are reviewed by experts and content specialists in the field. They are targeted for teachers, administrators, policymakers, and other busy practitioners needing rapid access to brief, highly synthesized, but also authoritative, information on a specific problem area.

Approximately 160 Digests are produced by the ERIC

Clearinghouses each year. Through 1991, over 1,200 Digests have been produced. **(See ERIC Ready Reference #10(A-B).**

The full text of selected Digests is made available for online access via certain vendors, e.g., DIALOG, GTE Education Services, etc. **(See Publication Type Code 073).**

9. Reference Tools Providing Access to the ERIC Database (ERICTOOLS)

The ERIC Facility prepares a variety of tools for the internal use of the organizations engaged in building the ERIC database. In some cases, the internal reference tools are of interest to heavy users of the ERIC database or to organizations engaged in similar database-building activities. In response to public interest, the internal ERIC publications listed below are made available in limited quantities for purchase via the ERIC Facility's self-sustaining ERICTOOLS program:

a. *Clearinghouse Number to ED Number Cross-Reference List*;
b. *Contract/Grant Number Index* (not currently scheduled);
c. *ERIC Processing Manual* (EPM);
d. *ERIC Source Directory*;
e. *ERIC Title Index* (RIE only);
f. *Identifier Authority List* (IAL);
g. *Report Number Index* (not currently scheduled).

INDEX

ACCESS ERIC, I-17
Acquisition and Assignment (of Documents), I-14
Adjunct ERIC Clearinghouses, I-8
Bibliographies, I-24
BRS Information Technologies, I-22
CD-ROM Vendors, I-22
Central ERIC, I-6
CIJE see *Current Index to Journals in Education* (CIJE), I-18
Clearinghouse Number/ED Number Cross-Reference List, I-14
Clearinghouses (Adjunct), I-8
Current Index to Journals in Education (CIJE), I-18, I-20
DIALOG Information Services, I-22, I-25
Digests, I-24
Document Delivery
  --On-Demand Orders, I-16
Editing, I-15
EDRS see ERIC Document Reproduction Service (EDRS), I-16
ERIC Administrative Bulletin (EAB), I-14
ERIC Clearinghouses,
  --Clearinghouse Publications, I-24
  --Database-Building Functions, I-6
  --Other Functions, I-7
  --Prefixes, I-7
  --Referral and Retrieval Services, I-21
  --User Services, I-15
ERIC Document Reproduction Service (EDRS), I-16
ERIC Network Directory, I-3, I-14
ERIC Partners, I-8
ERIC Processing and Reference Facility,
  --ERICTOOLS, I-25
  --Functions, I-13, I-14
ERIC Processing Manual (EPM), I-iv
ERIC Products
  --CIJE, I-20
  --RIE, I-20
  --*Thesaurus of ERIC Descriptors*, I-20
ERIC Ready Reference #6, I-8
ERIC Source Directory, I-14
ERIC System Components, I-1
ERIC Systems Products, I-3
ERIC Title Index, I-14
ERICTAPES, I-21
ERICTOOLS, I-25
Government Printing Office (GPO), I-17, I-20
GPO see Government Printing Office, I-20
GTE Education Services, I-22, I-25
Handling and Shipping, I-15
Identifier Authority List (IAL), I-14
Institute for Scientific Information (ISI),
  --Genuine Article Service, I-24
ISI, I-24
Journal Article Reprint Services I-24
Level 1, I-23
Level 2, I-23
Level 3, I-23
Microfiche, I-16
  --Level 1, I-23
  --Level 2, I-23
  --Level 3, I-23
  --Subscriptions, I-16
Monographs, I-24
On-Demand Orders, I-16
Online Vendors I-22
Oryx Press, I-20
Paper Copy Reproductions (Blowback), I-16, I-23
Prefixes (Clearinghouse), I-7
Publication/Project Preparation Manual, I-iv
Publications,
  --*Clearinghouse Number/ED Number Cross-Reference List*, I-14
  --*Current Index to Journals in Education* (CIJE), I-18, I-20
  --*ERIC Administrative Bulletin* (EAB), I-14
  --*ERIC Clearinghouse Publications*, I-24
  --*ERIC Network Directory*, I-3, I-14
  --*ERIC Source Directory*, I-14
  --*ERIC Title Index*, I-14
  --ERICTOOLS, I-25
  --*Identifier Authority List* (IAL), I-14
  --*Resources in Education*, I-13
  --*Source Journal Index*, I-18
  --*Thesaurus of ERIC Descriptors*, I-20
Reprints, I-24
Resources in Education (RIE), I-13
  --Complimentary Distribution, I-20
Reviews, I-24
RIE see *Resource in Education* (RIE), I-1
SilverPlatter Information, I-22
Source Journal Index, I-18
Support Contractors, I-13
Syntheses, I-24
Thesaurus of ERIC Descriptors, I-13, I-20
User Services and Reference Manual, I-iv
UMI see University Microfilms International (UMI), I-24
University Microfilms International (UMI),
  --Article Clearinghouse, I-24
Vocabulary Maintenance, I-15